

<b>Product Test Certificate</b>	<b>14001</b>	<b>14/01/2014</b>
---------------------------------	--------------	-------------------

Number Date

Line	Pack NoNo included		RHS/SHS/CHS Nominal Size (mm)				Specification	Grade	Steel Supplier	Testing Authority/ NATA (ILAC) Accreditation No			Steelmaking process
	From	To	d /do	b	t	L				Tensile	Impact	Chemical	
1	13344M10090	13344M10115	75	75	5	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9
2	13345M10001	13345M10004	89	89	2	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9
3	13345M10005	13345M10088	89	89	2	Any	AS/NZS 1163	C350 L0	Nam Kim	MTL/17219		FS/14877	BO,CC +note 9
4	13345M10089	13345M10113	89	89	3.5	Any	AS/NZS 1163	C350 L0	Nam Kim	MTL/17219		FS/14877	BO,CC +note 9
5	13345M10114	13346M10025	89	89	2	Any	AS/NZS 1163	C350 L0	Nam Kim	MTL/17219		FS/14877	BO,CC +note 9
6	13346M10027	13346M10058	89	89	3.5	Any	AS/NZS 1163	C350 L0	BSL	MTL/17219		BSL/632	BO,CC +note 9

Line	STEEL CHEMICAL ANALYSES (%)—As supplied by Steelmaker ("L")																MECHANICAL TEST RESULTS (Orientation—"L")								
	HEAT No	C	P	Mn	Si	S	Ni	Cr	Mo	Cu	Al	Ti	Nb	V	CE	SiE	Testing Report No- Sample ID	Condition	Tensile test			Impact test at 0°C			
		x100																	YS	TS	E	1	2	3	Ave
1	6370729	15.3	1.6	100.0	1.9	0.8	1.3	2.5	0.5	4.0	2.2	0.2	1.4	0.3	33	6	T 2475 1947	A	451	573	20				
2	6363589	14.9	2.1	74.0	0.7	1.1	1.4	2.5	0.4	2.6	3.1	0.2	0.1	0.3	28	6	T 2475 1949	A	395	475	35				
3	02XBTK130915	12.0	1.0	68.0	2.0	1.0	1.0	2.0	1.0	1.0	4.9	1.0	1.0	1.0	24	5	T 2475 1950	A	406	452	22				
4	02XBTK130914	12.0	1.0	68.0	2.0	1.0	1.0	2.0	1.0	1.0	4.9	1.0	1.0	1.0	24	5	T 2475 1951	A	465	504	19				
5	02XBTK130913	13.0	2.0	77.0	2.0	1.0	1.0	3.0	1.0	1.0	5.6	1.0	1.0	1.0	27	7	T 2475 1952	A	490	526	18				
6	6376039	15.4	1.8	74.0	0.8	1.3	1.4	2.4	0.4	3.3	4.0	0.2	0.1	0.3	29	5	T 2475 1953	A	441	508	29				

**Notes:** 1)  $CE=C+Mn/6+(Cr+Mo+V)/5+(Ni+Cu)/15$ ; 2)  $SiE=Si+2.5P$ ; 3) Gauge Length for E= 5.65vSo; 4) Impact test piece thickness is 5 mm; 5) For t less than 6 mm L0 properties derived as per CI 10.6.2.2 of AS/NZS 1163; 6) Data in the table refers to the samples representative for each line; 7) BSL=BlueScope Steel; YPE=Yien Phui Enterprise CO., LTD; BO,SC= Basic Oxygen,Continuous (Slab) Casting; ALS=Australian Laboratory Services Industrial; 8) The production date in the format yyddd constitutes the first 5 digits of the pack number and is printed on each length; 9) Information provided by the steel supplier " STEEL FEED: IN ACCORDANCE WITH CLAUSES 6 AND 10.6.2.2 OF AS/NZS 1163:2009 THESE COILS WERE PRODUCED FROM ALUMINIUM FULLY KILLED, FINE GRAINED STEEL AND ALUMINIUM HAS BEEN USED AS THE GRAIN REFINING ELEMENT".

**Packs covered by this certificate**

Line	Heat	Pack numbers
1	6370729	13344M10090 13344M10091 13344M10092 13344M10093 13344M10094 13344M10095 13344M10096 13344M10097 13344M10098 13344M10099 13344M10100 13344M10101
	6370729	13344M10102 13344M10103 13344M10104 13344M10105 13344M10106 13344M10107 13344M10108 13344M10109 13344M10110 13344M10111 13344M10112 13344M10113
	6370729	13344M10114 13344M10115
2	6363589	13345M10001 13345M10002 13345M10003 13345M10004
3	02XBTK13091515	13345M10005 13345M10006 13345M10007 13345M10008 13345M10009 13345M10010 13345M10011 13345M10012 13345M10013 13345M10014 13345M10015 13345M10016
	02XBTK13091515	13345M10017 13345M10018 13345M10019 13345M10020 13345M10021 13345M10022 13345M10023 13345M10024 13345M10025 13345M10026 13345M10027 13345M10028
	02XBTK13091515	13345M10029 13345M10030 13345M10031 13345M10032 13345M10033 13345M10034 13345M10035 13345M10036 13345M10037 13345M10038 13345M10039 13345M10040
	02XBTK13091515	13345M10041 13345M10042 13345M10043 13345M10044 13345M10045 13345M10046 13345M10047 13345M10048 13345M10049 13345M10050 13345M10051 13345M10052
	02XBTK13091515	13345M10053 13345M10054 13345M10055 13345M10056 13345M10057 13345M10058 13345M10059 13345M10060 13345M10061 13345M10062 13345M10063 13345M10064
	02XBTK13091515	13345M10065 13345M10066 13345M10067 13345M10068 13345M10069 13345M10070 13345M10071 13345M10072 13345M10073 13345M10074 13345M10075 13345M10076
	02XBTK13091515	13345M10077 13345M10078 13345M10079 13345M10080 13345M10081 13345M10082 13345M10083 13345M10084 13345M10085 13345M10086 13345M10087 13345M10088
4	02XBTK13091493	13345M10089 13345M10090 13345M10091 13345M10092 13345M10093 13345M10094 13345M10095 13345M10096 13345M10097 13345M10098 13345M10099 13345M10100
	02XBTK13091493	13345M10101 13345M10102 13345M10103 13345M10104 13345M10105 13345M10106 13345M10107 13345M10108 13345M10109 13345M10110 13345M10111 13345M10112
	02XBTK13091493	13345M10113
5	02XBTK13091317	13345M10114 13345M10115 13345M10116 13345M10117 13345M10118 13345M10119 13345M10120 13345M10121 13345M10122 13345M10123 13345M10124 13345M10125
6	6376039	13346M10027 13346M10028 13346M10029 13346M10030 13346M10031 13346M10032 13346M10033 13346M10034 13346M10035 13346M10036 13346M10037 13346M10038
	6376039	13346M10039 13346M10040 13346M10041 13346M10042 13346M10043 13346M10044 13346M10045 13346M10046 13346M10047 13346M10048 13346M10049 13346M10050
	6376039	13346M10051 13346M10052 13346M10053 13346M10054 13346M10055 13346M10056 13346M10057 13346M10058

**Independent Tube Mills confirms that products listed above were manufactured, tested, and supplied in full compliance with the specifications quoted in this certificate**

Authorized signatory: **R.Fisher**